

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 23, 25, 27-29, 31, 33-38 and 40-44 are now pending in this application. Claims 23, 28, 31 and 38 are independent. Claims 24, 26, 30, 32 and 38 have been canceled.

Reconsideration of this application, as amended, is respectfully requested.

Rejection Under 35 U.S.C § 112, First Paragraph

Claims 23-44 stand rejected under 35 U.S.C. § 112, first paragraph. This rejection is respectfully traversed.

The Examiner's maintains that the limitation concerning "more than one audio channel" is not enabled by the specification. While Applicants do not concede to this position, Applicants have removed the limitation from the claims in order to expedite examination and allowance of the present application. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections Under 35 U.S.C §§ 102 and 103

Claims 23-44 stand rejected under 35 U.S.C § 102(e) as being anticipated by Fujinami. Claims 23-44 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Applicants' admitted prior art in view of Fujinami. These rejections are respectfully traversed.

In the parent application serial no. 08/735,572, Applicants' submitted amendments to the claims which placed the application into condition for allowance. Specifically, the amendments related to first and second audio presentation parts in combination with other structural features. Applicants have made corresponding amendments in the present application. Therefore, it is respectfully asserted that these rejections have been overcome. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

Terminal Disclaimer

In order to overcome any potential double patenting rejection between the present application and the parent application serial no. 08/735,572, Applicants have voluntarily filed a terminal disclaimer.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that

the Examiner reconsider all presently outstanding rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mr. Scott L. Lowe (Reg. No. 41,458) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment

Terminal Disclaimer



VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 24, 26, 30, 32 and 39 have been canceled.

The claims have been amended as follows:

23. (Three times Amended) A device for reproducing a digital signal recorded on a medium, the digital signal including a video signal **and an** **[, a plurality of]** audio **signal**, **[signals encoded into audio channels wherein each]** **the** audio signal **being** **[is]** composed of data units and each data unit including information for **[both indicating a coding mode and]** identifying **a type of** **[the]** audio signal represented by the data unit, **[and at least more than one audio channel,]** a block of the data units **of audio signal** being sequentially interleaved between data units of video signal, **[each audio signal being represented by one of the data units in the block,]** comprising:

a demodulator for demodulating the digital signal to restore an original signal;

a signal processor for receiving the **[plurality of]** audio **signal** **[signals]**, extracting the indicating information, separating the data units corresponding to **[at least one]** **a first type** of **[the plurality of]** audio **signal from data units corresponding to a second type of audio signal** **[signals]** based on the extracted indicating information, **said signal processor including a system time clock, a memory for storing the data units corresponding to the first type and the second type of audio signal, and first and second audio**

presentation parts receiving the system time clock to control a presentation timing of the first type or the second type of audio signal;

and

a controller, coupled to the signal processor, controlling the signal processor to output [separate] the data units corresponding to [one] the first type or the second type of the audio signal [signals] designated by a user input.

25. (Twice Amended) A device as claimed in claim 23 [24], wherein the first type of audio signal corresponds to accompaniment sound.

27. (Twice Amended) A device as claimed in claim 23, wherein the [plurality of] audio signal is [signals are] encoded by an MPEG coding mode, wherein the signal processor further comprises:

an MPEG audio decoder for decoding [said plurality of] the audio signal [signals].

28. (Three Times Amended) A method for reproducing a digital signal recorded on a medium, said digital signal including a video signal and an [, a plurality of] audio signal, the [signals encoded into audio channels wherein each] audio signal being [is] composed of [at least] data units [of audio information,] and each data unit including [indicating] information for

[indicating a coding mode and] identifying a type of [the] audio signal represented by the data unit, **[and at least more than one audio channel,]** a block of the data units of audio signal being sequentially interleaved between data units of video signal, **[each audio signal being represented by one of the data units in the block,]** the method comprising the steps of:

demodulating the digital signal to restore an original signal;
receiving the **[video signal and the plurality of]** audio signal [signals];
extracting the indicating information;
separating the data units corresponding to **[at least one] a first type** of **[the plurality of]** audio signal from data units corresponding to a second type of audio signal [signals] based on the extracted indicating information, by storing the first and second types of audio signals in a memory, receiving the data units corresponding to the first and second types of audio signals in first and second audio presentation parts along with a system time clock to control a presentation timing of the first or second type of audio signal; and

[controlling the separating step to separate data units corresponding to one of the plurality of] outputting one of the first or second types of audio signals in response to a user input designating one of the first or second types [plurality] of audio signals.

29. (Twice Amended) The method of claim 28, wherein the step of separating

includes separating **[one] the first type** of the audio **signal [signals]** representing accompaniment sound.

31. (Four Times Amended) A device for processing a digital signal, comprising:

an audio signal processor receiving indicating information and **[first] data** units of digital audio data **of a first type and a second type** interleaved **[into a sequential order]** with **[second units of]** digital video data, **[each unit of the digital audio data including more than one audio channel, and]** the indicating information indicating **[both a coding mode and] an** identification of the **[digital audio] data units of the first type and the second type**, the audio signal processor extracting the indicating information, and separating **[one of] the [audio] data units of the first type from the data units of the second type** using the indicating information, **said signal processor including a system time clock, a memory for storing the data units of the first type and the second type, and first and second audio presentation parts receiving the system time clock to control a presentation timing of the data units of the first type or the second type;** and

a control circuit controlling the audio signal processor to **output an [separate one of the] audio signal corresponding to the data units of one of the first or second types,** based on **a** user input **[designating one of the audio data].**

33. (Twice Amended) The device of claim 31 [32], wherein the audio data of the first type includes accompaniment sound.

34. (Twice Amended) The device of claim 31 [32], wherein the audio data of the first type includes accompaniment sound and vocals, which are associated with the digital video data.

35. (Three Times Amended) The device of claim 31, **[further comprising: a timing signal generator generating a timing signal; and]** wherein the audio signal processor compares the system time clock [timing signal] to timing information in the digital audio data, and outputs **[the separated one of the]** audio data with a timing based on the comparison.

38. (Four Times Amended) A method for processing a digital signal, comprising:
receiving indicating information and **[first] data** units of digital audio data of a first type and a second type interleaved **[into a sequential order]** with **[second units of]** digital video data, **[each unit of the digital audio data including more than one audio channel, and]** the indicating information indicating **[both a coding mode and] an** identification of the **[digital audio]** data units of the first type and the second type;
extracting the indicating information;

separating **[one of]** the **[audio]** data **units of the first type from the data units of the second type** using the indicating information **by storing the data units of the first and second types in a memory, receiving the data units of the first and second types in first and second audio presentation parts along with a system time clock to control a presentation timing of data units of the first or second type;** and

outputting audio data corresponding to the data units of the first or second type in response to a user input **[designating one of the audio data]**.

40. (Twice Amended) The method of claim **38 [39]**, wherein the audio data of the first type includes accompaniment sound.

41. (Twice Amended) The method of claim **38 [39]**, wherein the audio data of the first type includes accompaniment sound and vocals, which are associated with the digital video data.

42. (Three Times Amended) The method of claim 38, further comprising:

[generating a timing signal;]

comparing the **system time clock [timing signal]** to timing information in the digital audio data; and

outputting the **[separated one of the]** audio data **with a timing** based on the comparison.

44. (Twice Amended) The device of claim 23, wherein the signal processor includes a switch that selectively outputs the data units **of the first type or the second type** **[under control of the control circuit]**.